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APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/966,481	(09/28/2001	Nathan Y. Moyal	INTL-0552-US (P11111)	INTL-0552-US (P11111) 6467	
21906	7590	10/24/2003	•.	EXAM	IINER	
TROP PRU			NGUYEN, HAI L			
8554 KATY	FREEWA	ΛY				
SUITE 100				ART UNIT	PAPER NUMBER	
HOUSTON,	TX 770	24		2816		

DATE MAILED: 10/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

		<u> </u>		am
		Application No.	A ant(s)	
		09/966,481	MOYAL, NATHAN	ſ.
	Office Action Summary	Examiner	Art Unit	
		Hai L. Nguyen	2816	
Period fo	The MAILING DATE of this communication a	opears on the cover sheet with	h the correspondence addr	ess
A SH THE - Exte after - If the - If NO	ORTENED STATUTORY PERIOD FOR REP MAILING DATE OF THIS COMMUNICATION nsions of time may be available under the provisions of 37 CFR 1 SIX (6) MONTHS from the mailing date of this communication. Period for reply specified above is less than thirty (30) days, a reduction of the provision of the pr	136(a). In no event, however, may a republic within the statutory minimum of thirty d will apply and will expire SIX (6) MONT	oly be timely filed (30) days will be considered timely. HS from the mailing date of this com	munication.
- Any	reply received by the Office later than three months after the mail ed patent term adjustment. See 37 CFR 1.704(b).			
1)⊠	Responsive to communication(s) filed on 04	! August 2003 .		
2a)⊠	This action is FINAL . 2b) 1	his action is non-final.		
3) <u></u> Disposit	Since this application is in condition for allow closed in accordance with the practice unde ion of Claims			merits is
4)⊠	Claim(s) <u>11-13,16-18,20 and 44-46</u> is/are pe	ending in the application.		
	4a) Of the above claim(s) is/are withdr	awn from consideration.		
5)□	Claim(s) is/are allowed.			
6)⊠	Claim(s) <u>11-13,16-18,20 and 44-46</u> is/are rej	ected.		
7)	Claim(s) is/are objected to.			
8)□	Claim(s) are subject to restriction and	or election requirement.		
Applicati	ion Papers			
9)[The specification is objected to by the Examir	ner.		
10)⊠	The drawing(s) filed on <u>28 September 2001</u> is	/are: a)⊠ accepted or b)☐ ob	jected to by the Examiner.	
	Applicant may not request that any objection to	= : :	, ,	
11)	The proposed drawing correction filed on		sapproved by the Examiner.	
	If approved, corrected drawings are required in r	, ,		
•	The oath or declaration is objected to by the E	xaminer.		
	ınder 35 U.S.C. §§ 119 and 120			
	Acknowledgment is made of a claim for foreign	gn priority under 35 U.S.C. §	119(a)-(d) or (f).	
a)	☐ All b)☐ Some * c)☐ None of:			
	1. Certified copies of the priority documen			
	2. Certified copies of the priority documer	nts have been received in Ap	plication No	
* 5	3. Copies of the certified copies of the pri application from the International B See the attached detailed Office action for a lis	Bureau (PCT Rule 17.2(a)).		age
	Acknowledgment is made of a claim for domes	•		pplication).
a) The translation of the foreign language p Acknowledgment is made of a claim for dome:	rovisional application has be	en received.	, ,
Attachmen				
2) 🔲 Notic	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449) Paper No(s)	5) D Notice of In	ummary (PTO-413) Paper No(s). formal Patent Application (PTO-	
S. Patent and T. TOL-326 (R	rademark Office ev. 04-01) Office A	Action Summary	Part of Pa	per No. 11

DETAILED ACTION

Response to Amendment

1. The amendment received on 08/04/03 has been reviewed and considered with the following results:

As to the objections to claim 11, Applicant's amendments have overcome the objections, as such; the objections have been withdrawn.

As to the rejections to the claims, under 35 U.S.C. 112, 2nd paragraph, Applicant's amendments have overcome the rejections, as such; the rejections have been withdrawn.

As to the prior art rejections to the claims, the arguments and/or comments by the applicant have been carefully reviewed, but are not persuasive. A new action on the merits appears below in view of Applicant's amendments to the claims.

The response to Applicant's arguments is addressed as set forth below.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 11, 13, 16-18, 20, 44, and 45 are rejected under 35 U.S.C. 102(b) as being anticipated by Shay (US 5,323,067; previously cited).

With regard to claims 11, Shay discloses in Fig.1 an integrated circuit comprising an activation circuit (12, 14, 16, 50, 62, 76) to determine whether a supply voltage (VDD) reaches a

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predetermined level, the activation circuit including an inverter (76) coupled to the gate of a load transistor (64), a second transistor (66) coupled to the load transistor and a third transistor (60) coupled between the load transistor and the second transistor; a pulse generator (68, 70, 72, 74) to generate pulses (38, 40) to indicate that the supply voltage is ramping up and to terminate the generation of the pulses after the supply voltage reaches a predetermined level (see column 4, line 16 through column 5, lines 33); and a feedback path provide an output of the pulse generator to the activation circuit, the activation circuit to latch a high in response to a low signal on the feedback path (note 38 is High in response to a low on node 30).

With regard to claim 13, the integrated circuit includes a level detector (14) that detects when a voltage is above at least two transistor threshold voltages, the level detector operative to control the pulse generator (column 4, line 6 through column 5, line 13).

With regard to claim 16, the integrated circuit includes a pair of transistors (68, 70) that must both conduct in order to generate the pulse.

With regard to claim 17, the integrated circuit includes a capacitor circuit (64) to enable the supply voltage to reach a designated output level (see column 5, lines 14-33).

With regard to claim 18, the integrated circuit includes a hysteresis sense stage (58, 60) coupled to the capacitor circuit (see column 4, line 27 through column 5, line 13).

With regard to claim 20, the integrated circuit includes a circuit (18) to latch the pulse generator in response to the supply voltage being in a first state.

With regard to claim 44, the load transistor (64) is coupled to the supply voltage (20).

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With regard to claim 45, the integrated circuit further includes a second activation circuit (80) to determined whether the supply voltage reaches the predetermined level (see column 5, lines 34-54).

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shay in view of Ansel et al. (US 5,809,312; previously cited).

The above discussed the integrated circuit of Shay meets all of the claimed limitations except for a logic functionality (52 in instant Fig.5) to emulate logic that is difficult to trigger and to determine whether the supply voltage has reached a level sufficient to trigger the difficult to trigger logic. Ansel et al. teaches in Fig.3 a circuit having a logic functionality (310) as recited in the claim. Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention was made to utilize that logic functionality taught by Ansel et al. with the prior art (Fig.1 of Shay) in order to ensure all of the critical integrated circuits are operating correctly.

6. Claim 46 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shay in view of Wu et al. (US 6,288,584).

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With regard to claim 46, the above discussed the integrated circuit of Shay meets all of the claimed limitations except for the limitation that the capacitor circuit includes a first capacitor coupled to the supply voltage and a second capacitor coupled to the first capacitor through a transistor. Wu et al. teaches in Fig.3 an integrated circuit having a capacitor circuit (100, 102) that includes a first capacitor (14) coupled to the supply voltage and a second capacitor (16) coupled to the first capacitor through a transistor (30) as recited in the claim.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of applicant's invention was made to utilize that teaching of Wu et al. with the prior art (Fig.5 of Shay et al.) for the advantage of saving power by not drawing current either on the standby mode or after the supply voltage reaches the predetermined level,

Response to Arguments

- 7. Applicant's first argument is that "The Office Action states that in Shay an inverter 76 is coupled to the gate of a load transistor. Office Action, page 3. However, transistor 76 is a latching transistor, not an inverter" is not persuasive because element 76 (Shay's Fig.1) is inherently an inverter since it does generate an output signal (node 30) which is a complement of an input signal (node 38). Even though, Shay calls it under a different name, it still has a functional of an inverter. Therefore, by given the broadest reasonable interpretation, element 76 is an inverter.
- 8. Applicant's second argument is that "the Office Action indicates that transistors 68, 70, 72, 74 of Shay generate pulses to indicate that a supply voltage is ramping up and to terminate pulse generation after the supply voltage reaches a predetermined level. However, these



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transistors are an inverter, not a pulse generator. Shay, 3:55-60. Thus, this inverter does not act as a pulse generator" is not persuasive because those elements clearly are a pulse generator since it does generate a low pulse output signal (at node 38) to indicate that a supply voltage is ramping up and to terminate pulse generation after the supply voltage reaches a predetermined level (see column 4 line 16 through column 5 line 9). Even though, Shay does not disclose those elements are a pulse generator, it still has a functional of a pulse generator. Therefore, by given the broadest reasonable interpretation, those elements are a pulse generator.

9. Applicant's last argument is that "Nor does Shay include an activation circuit that latches a high signal in response to a low signal on a feedback path" is not persuasive because the disclosure (see column 6 lines 21-28) clearly describes that the activation circuit latches a high signal (at node 38) in response to a low signal (at node 30) on a feedback path.

Therefore, the rejections to those claims are proper and remain as set forth above.

Conclusion

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this

final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai L. Nguyen whose telephone number is 703-306-9178 and Right Fax number is 703-746-3951. The examiner can normally be reached on Monday-

Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Callahan can be reached on 703-308-4876. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

October 17, 2003

IMOTHYP. CALLAHAN SUPERVISORY PATENT EXAMINER **TECHNOLOGY CENTER 2800**

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